State of California AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-12-41

Relating to Certification of New Heavy-Duty Off-Road Equipment Engines

NAVISTAR INTERNATIONAL TRANSPORTATION CORPORATION

Pursuant to the authority vested in the Air Resources Board by Sections 43000.5, 43013 and 43018 of the Health and Safety Code; and,

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following Navistar International Transportation Corporation 2000 model-year engine, with rated power between 175 and 750 horsepower, and exhaust emission control systems are certified as described below for use in heavy-duty off-road equipment:

<u>Typical Equipment Usage</u>: Loader, Tractor, Compressor and Pump.

Fuel Type: Diesel

Engine Family	Liters	(Cubic Inches)	Exhaust Emission Control Systems and Special Features
YNVXL0530ANB	8.7	(530)	Turbocharger Engine Control Model

Engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOx), and particulate matter (PM) certification exhaust emission standards, in grams per brake horsepower-hour (g/bhp-hr), and the opacity of smoke emission standards, in percent (%), during acceleration (Accel), lugging (Lug), and peak (Peak) modes, for this engine family are (Title 13, California Code of Regulations, Section 2423):

Exhaust Emissions (g/bhp-hr)			<u>bhp-hr)</u>	Smoke Opacity (%)		
THC	<u>co</u>	<u>NOx</u>	<u>PM</u>	Accel Lug Peak		
1.0	8.5	6.9	0.4	20 15 50		

The THC, CO, NOx and PM exhaust emission certification values, in g/bhp-hr, and the opacity of smoke emission certification values, in percent (%), for this engine family are:

Exhaust Emissions (g/bhp-hr)			ohp-hr)	_ Smoke Opacity (%)		
THC	<u>co</u>	<u>N0x</u>	<u>PM</u>	<u>Accel</u> <u>Luq</u>	<u>Peak</u>	
0.1	0.4	6.8	0.1	6 4	11	

BE IT FURTHER RESOLVED: That the listed engine models comply with the "Exhaust Emission Standards and Test Procedures--Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2423) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed engine models also comply with the "Emission Control Labels--1996 and Later Heavy-Duty Off-Road Diesel Cycle Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2425 et seq.).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

R. B. Summerfield, Chief

Mobile Source Operations Division

LARGE ENGINE MODEL SUMMARY

Process Code: New Submission

Manufacturer: Navistar E. O. # U-R-12-41

9.Emission Control Jevice Per SAE J1930	ECM, TC, DI	ECM, TC, DI	ECM, TC, DI
8.Fuel Rate: (lbs/hr)@peak torque [Average value 74.6	68.0	63.9
mm/stroke@peak torque	Average value 139.2	126.9	127.2
6.Torque @ RPM (SEA Gross)	Advertised 670 @ 1600	611 @ 1600	628 @ 1500
d) F)	Average value 84.9	78.5	74.4
mm/stroke @ peak HP (for diesel only)	Average value 115.2	106.5	100.9
3.BHP@RPM (SAE Gross)	Advertised 225 @ 2200	205@ 2200	195 @ 2200
2.Engine Model	IC225D	IC205D	IC195D
1.Engine Code	IC225D	IC205D	IC195D
	mm/stroke @ peak HP (1bs/hr) @ peak HP 6.Torque @ RPM mm/stroke@peak (1bs/hr)@peak torque D (for diesels only) (for diesels only) (SEA Gross) torque	3.BHP@RPM mm/stroke @ peak HP (lbs/hr) @ peak HP 6.Torque @ RPM mm/stroke@peak (SAE Gross) (for diesel only) (for diesels only) (for diesels only) (SEA Gross) torque Advertised Average value Average value Advertised Average value 115.2 84.9 670 @ 1600 139.2	3.BHP@RPM mm/stroke @ peak HP (lbs/hr) @ peak HP (sEA Gross) mm/stroke@peak (sAE Gross) (for diesel only) (for diesels only) (sEA Gross) torque Advertised Average value Average value Advertised Average value 115.2 84.9 670 @ 1600 139.2 225 @ 2200 116.5 78.5 611 @ 1600 126.9